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DATE: August 25, 2005

PTO IDENTIFIER: Application Number 09/554,733-Conf. #2996  
Patent Number

Inventor: Leo Mans et al.

MESSAGE TO: US Patent and Trademark Office

FAX NUMBER: (571) 273-8300

FROM: CONNOLLY BOVE LODGE & HUTZ LLP  
Susan E. Shaw McBee

PHONE: (202) 331-7111

Attorney Dkt. #: 22135-00005-US

PAGES (Including Cover Sheet): 12

CONTENTS: Fee Transmittal (1 page)  
Appcal Brief (8 pages)  
Appcal Brief Transmittal (1 page)  
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Application No. (if known): 09/554,733

Attorney Docket No.: 22135-00005-US

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Fee Transmittal (1 page)  
Appeal Brief (8 pages)  
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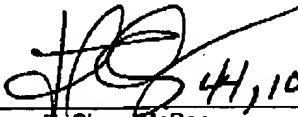
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<b>Effective on 12/08/2004.</b> <b>Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4812).</b> <b>FEE TRANSMITTAL</b> <b>For FY 2005</b>		<b>Complete if Known</b> Application Number 09/554,733-Conf. #2996 Filing Date May 19, 2000 First Named Inventor Leo Mans Examiner Name A. A. Wachtel Art Unit 1764 Attorney Docket No. 22135-00005-US	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27			
<b>TOTAL AMOUNT OF PAYMENT</b> (\$) 620.00			

<b>METHOD OF PAYMENT (check all that apply)</b> <input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> None <input type="checkbox"/> Other (please identify): _____ <input checked="" type="checkbox"/> Deposit Account Deposit Account Number: 22-0185 Deposit Account Name: Connolly Bove Lodge & Hutz LLP For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) <input checked="" type="checkbox"/> Charge fee(s) indicated below <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee <input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 <input checked="" type="checkbox"/> Credit any overpayments	
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<b>FEE CALCULATION</b> <b>1. BASIC FILING, SEARCH, AND EXAMINATION FEES</b>							
	<b>FILING FEES</b> Application Type Fee (\$) Small Entity Fee (\$)		<b>SEARCH FEES</b> Fee (\$) Small Entity Fee (\$)		<b>EXAMINATION FEES</b> Fee (\$) Small Entity Fee (\$)		<b>Fees Paid (\$)</b>
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
<b>2. EXCESS CLAIM FEES</b>							
<b>Fee Description</b>							<b>Small Entity Fee (\$)</b>
Each claim over 20 (including Reissues)							50
Each independent claim over 3 (including Reissues)							200
Multiple dependent claims							360
<b>Total Claims</b>		<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>	<b>Multiple Dependent Claims</b>		<b>Fee (\$)</b>
- 20 =		x	=		<b>Fee (\$)</b>		<b>Fee Paid (\$)</b>
<b>Indep. Claims</b>		<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>			
- 3 =		x	=				
<b>3. APPLICATION SIZE FEE</b> If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
<b>Total Sheets</b>	<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>			
- 100 =	/50	(round up to a whole number) x	=				
<b>4. OTHER FEE(S)</b>							
Non-English Specification, \$130 fee (no small entity discount)							
Other (e.g., late filing surcharge): 1251 Extension for response within first month							120.00
1402 Filing a brief in support of an appeal							500.00

<b>SUBMITTED BY</b> Signature <i>[Signature]</i> Registration No. 39,294 Telephone (202) 331-7111 Name (Print Type) Susan E. Shaw McBee Date August 25, 2005	
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TRANSMITTAL OF APPEAL BRIEF			Docket No. 22135-00005-US
In re Application of: Leo Mans et al.			
Application No. 09/554,733-Conf. #2996	Filing Date May 19, 2000	Examiner A. A. Wachtel	Group Art Unit 1764
Invention: SPONGE CLOTH BASED ON CELLULOSE AND PRODUCTION THEREOF			
<p style="text-align: center;"><b><u>TO THE COMMISSIONER OF PATENTS:</u></b></p> <p>Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: <u>May 27, 2005</u>.</p> <p>The fee for filing this Appeal Brief is <u>\$ 500.00</u>.</p> <p><input checked="" type="checkbox"/> Large Entity <input type="checkbox"/> Small Entity</p> <p><input checked="" type="checkbox"/> Request for one month extension of time.</p> <p>The fee for the extension of time is <u>\$ 120.00</u>.</p> <p><input type="checkbox"/> A check in the amount of _____ is enclosed.</p> <p><input checked="" type="checkbox"/> Charge the amount of the fee to Deposit Account No. <u>22-0185</u>. This sheet is submitted in duplicate.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. <u>22-0185</u>. This sheet is submitted in duplicate.</p> <div style="text-align: right; margin-top: 20px;"><p>Dated: <u>August 25, 2005</u></p></div> <div style="margin-top: 20px;"><p> _____ Susan E. Shaw McBee Attorney Reg. No. : 39,294 CONNOLLY BOVE LODGE &amp; HUTZ LLP 1990 M Street, N.W., Suite 800 Washington, DC 20036-3425 (202) 331-7111</p></div>			

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AUG 25 2005

Docket No.: 22135-00005-US  
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Leo Mans et al.

Application No.: 09/554,733

Confirmation No.: 2996

Filed: May 19, 2000

Art Unit: 1764

For: SPONGE CLOTH BASED ON CELLULOSE  
AND PRODUCTION THEREOF

Examiner: A. A. Wachtel

APPEAL BRIEF

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

As required under § 41.37(a), this brief is filed within three months of the Notice of Appeal filed in this case on May 27, 2005 with a one month extension of time, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

- |      |   |
|------|---|
| I.   | Real Party In Interest                        |
| II   | Related Appeals and Interferences             |
| III. | Status of Claims                              |
| IV.  | Status of Amendments                          |
| V.   | Summary of Claimed Subject Matter             |
| VI.  | Grounds of Rejection to be Reviewed on Appeal |

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Docket No.: 22135-00005-US

VII.	Argument
VIII.	Claims
IX.	Evidence
X.	Related Proceedings
Appendix A	Claims

**I. REAL PARTY IN INTEREST**

The real party in interest for this appeal is:

Kalle GmbH

**II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS**

The undersigned is unaware of any other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

**III. STATUS OF CLAIMS****A. Total Number of Claims in Application**

There are 21 claims pending in application.

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Docket No.: 22135-00005-US

**B. Current Status of Claims**

1. Claims canceled: N/A
2. Claims withdrawn from consideration but not canceled: N/A
3. Claims pending: 1-21
4. Claims allowed: 6-21
5. Claims rejected: 1-5

**C. Claims On Appeal**

The claims on appeal are claims 1-5

**IV. STATUS OF AMENDMENTS**

The claims in Appendix A incorporate the amendments indicated in the paper filed by Applicant on May 28, 2005.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention to involves an economically and ecologically better process to produce sponge cloth which contains no or at least distinctly less troublesome impurities and has a consistently high quality. Such a sponge cloth is obtainable by the amine oxide process that utilizes solutions of cellulose in a mixture of an N-oxide of a tertiary amine and water<sup>1</sup>. A particularly suitable N-oxide is N-methylmorpholine N-oxide (NMMO).

The inventive sponge cloth has a density of at least 109.6 kg/m<sup>3</sup> which is based on cellulose and has been provided with an internal reinforcement. The inventive sponge cloth has been obtained by an amine oxide process without being exposed to conditions where a blowing agent decomposes to form gaseous products so as to cause a foam.

<sup>1</sup> With respect to allowed method claims 6-21, cellulose is precipitated in a bath containing an dilute aqueous NMMO solution as disclosed in the present application; pure NMMO would not work. This is noted in response to the Examiner's statement of reasons for allowance of these claims.

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## VI. GROUNDS OF OBJECTION TO BE REVIEWED ON APPEAL

The single issue on appeal is whether claims 1-5 are patentable over WO 97/42259 ("Chevalier").

## VII. ARGUMENT

The Examiner contends that Chevalier teaches that the sponge cloth density can vary from 20 to 100 kg/m<sup>3</sup>, and this supposedly establishes density as a results effective variable. Applicants respectfully disagree. Namely, Chevalier teaches a sponge or sponge cloth having a specific structure with macro- and micropores, which has a density of 20 to 100 kg/m<sup>3</sup>. To the contrary, Applicants' instantly claimed sponge cloth necessarily has a density of at least 109.6 kg/m<sup>3</sup> which is based on cellulose and has been provided with an internal reinforcement. As admitted by the Examiner, the sponge cloth of Chevalier has a density from 20-100 kg/m<sup>3</sup>, which is below the minimum density recited in claims 1-5.

In other words, a sponge cloth obtained by an amine oxide process and the sponge cloth taught by Chevalier do not have the same properties. In particular, the present claim 1 recites a minimum preferred density which is above the highest permissible density for Chevalier, namely 100 kg/m<sup>3</sup>.<sup>2</sup> Thus, Chevalier does not anticipate claims 1-5 since the prior art does not contemplate the use of an amine oxide process as claimed by Applicant, and indeed, does not teach or suggest a density higher than 100 kg/m<sup>3</sup>.

The PTO has the burden of showing a prima facie case of obviousness. *In re Mayne*, 104 F.3d at 1341. A *prima facie* case of obviousness arises when the ranges of a claimed composition overlap the ranges disclosed in the prior art. See *In re Peterson*, 315 F.3d 1325, 1329 (Fed. Cir. 2003); *In re Geisler*, 116 F.3d 1465, 1469 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 (Fed. Cir. 1990); *In re Malagari*, 499 F.2d 1297, 1303 (CCP A 1974). Where the "claimed ranges are completely encompassed by the prior art, the conclusion [that the claims are *prima facie* obvious] is even more compelling than in cases of mere overlap." *Peterson*, 315



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Docket No.: 22135-00005-US

F.3d at 1330. Even without complete overlap of the claimed range and the prior art range, a minor difference shows a *prima facie* case of obviousness. *Haynes Int'l v. Jessop Steel Co.*, 8 F.3d 1573, 1577 n.3 (Fed. Cir. 1993).

Here, not only do the ranges not completely overlap, they do not overlap AT ALL, and instead are substantially different. Namely, claims 1-5 recite a sponge cloth with a density of at least 109.6 kg/m<sup>3</sup> while Chevalier teaches sponge cloth having a density of from 20-100 kg/m<sup>3</sup>. There is simply no overlap, nor is there a "minor" difference.

What a reference teaches or suggests must be examined in the context of the knowledge, skill, and reasoning ability of a skilled artisan. What a reference teaches a person of ordinary skill is not, as the Examiner appears to believe, limited to what a reference specifically "talks about" or what is specifically "mentioned" or "written" in the reference. Under the proper legal standard, a reference will teach away when it suggests that the developments flowing from its disclosures are unlikely to produce the objective of the applicant's invention. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). A statement that a particular combination is not a preferred embodiment does not teach away absent clear discouragement of that combination. *In re Fulton*, 391 F.3d at 1199-1200. The Examiner apparently believes that it was recognized in the art at the time the invention that the sponge cloth density value was a variable that could be modified by adjusting the amount of pore former present, as well as the degree of compression of cellulosic dough in a mold for the purpose of providing an optimally durable sponge cloth with sufficient lifecycle longevity. However, there is simply no teaching or suggestion by Chevalier to control the amount of pore former in the cellulosic dough in order to achieve a density of the final product of more than 100 kg/m<sup>3</sup>. In fact, Chevalier teaches away<sup>3</sup> from sponge cloths having densities above 100 kg/m<sup>3</sup>. The presently claimed sponge cloth does not require such a specific

---

<sup>2</sup> Since Chevalier teaches a density of from 20-100 kg/m<sup>3</sup>, Applicants' instant claims cover at least densities above those reported by Chevalier, if not literally, at least under the doctrine of equivalents. See Chevalier at page 21, lines 3-4 of the WO publication.

<sup>3</sup> Chevalier recommends a pre-treatment of the cellulose (page 6, l. 26, to page 8, l. 3). The pretreatment is accompanied by a degradation of the cellulose, i.e. the degree of polymerization (DP) is lowered, which has a negative effect on the mechanical properties and potentially the density of the final sponge article.

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structure as in Chevalier, and contrary to the teaching of Chevalier, has a density above 100 kg/m<sup>3</sup>.

In Chevalier's examples, aqueous sodium hydroxide solution is the only solvent employed for the cellulose. Thus Chevalier does not employ an amine oxide process as recited in the instant claims 1-5. Indeed, Chevalier teaches that the NMMO process had previously only been mastered in the production of cellulose fibers (page 4, lines. 3-5; see also the equivalent of Chevalier, US Patent No. 6,129,867 at col. 2, l. 64-67).

The only intrinsic solvent for cellulose disclosed in detail in Chevalier is aqueous sodium hydroxide. Solely in the discussion of the state of the art Chevalier mentions N-methyl-morpholine N-oxide (NMMO) as solvent for cellulose in other processes. But in this respect he states that "[o]nly fiber production from solutions of cellulose in NMMO has currently been completely mastered, in particular by Courtaulds who market the fibers under the trade mark Tencel®" (page 4, lines 3-5). Thus, Chevalier thus does not provide any motivation to replace the only solvent he teaches, aqueous sodium hydroxide solution, with an NMMO-solution.

For all these reasons, it is respectfully submitted that a sponge cloth obtained by the amine oxide process and having the properties as set forth in claims 1-5 of the present application is therefore not anticipated, nor rendered obvious by Chevalier.

#### VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

#### IX. EVIDENCE

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

Application No.: 09/554,733

Docket No.: 22135-00005-US

## X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above.

Applicant hereby authorizes the Commissioner to please charge our Deposit Account No. 22-0185, under Order No. 22135-00005-US in the amount of from which the undersigned is authorized to draw.

Dated: August 25, 2005

Respectfully submitted,

By

  
Susan E. Shaw McBee

For Registration No.: 39,294

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Attorney for Applicant

Application No.: 09/554,733

Docket No.: 22135-00005-US

**APPENDIX A****Claims Involved in the Appeal of Application Serial No. 09/554,733**

1. (previously presented) A sponge cloth having a density of at least 109.6 kg/m<sup>3</sup> which is based on cellulose and has been provided with an internal reinforcement, which has been obtained by an amine oxide process without being exposed to conditions where a blowing agent decomposes to form gaseous products and so as to cause a foam.

2. (previously presented) The sponge cloth of claim 1, wherein the amine oxide used in the process is N-methylmorpholine N-oxide.

3. (previously presented) The sponge cloth of claim 1, wherein the internal reinforcement comprises cotton fibers, viscose fibers or a polymeric net.

4. (previously presented) The sponge cloth of claim 1, including at least one plasticizer.

5. (previously presented) The sponge cloth of claim 1, impregnated with a biocidally active agent.

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Effective on 12/01/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).		Complete if Known	
<b>FEE TRANSMITTAL</b> <b>For FY 2005</b>		Application Number	09/654,733-Conf. #2896
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Filing Date	May 19, 2000
TOTAL AMOUNT OF PAYMENT (\$)		First Named Inventor	Leo Mans
620.00		Examiner Name	A. A. Wachtel
		Art Unit	1764
		Attorney Docket No.	22135-00005-US

METHOD OF PAYMENT (check all that apply)	
<input type="checkbox"/> Check	<input type="checkbox"/> Credit Card
<input type="checkbox"/> Money Order	<input type="checkbox"/> None
<input type="checkbox"/> Other (please identify):	
<input checked="" type="checkbox"/> Deposit Account	Deposit Account Number: 22-0185 Deposit Account Name: Connolly Bove Lodge & Hutz LLP
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)	
<input checked="" type="checkbox"/> Charge fee(s) indicated below	<input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee
<input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17	<input checked="" type="checkbox"/> Credit any overpayments

FEE CALCULATION							
<b>1. BASIC FILING, SEARCH, AND EXAMINATION FEES</b>							
Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
<b>2. EXCESS CLAIM FEES</b>							
<b>Fee Description</b>						Small Entity	
						Fee (\$)	Fee (\$)
Each claim over 20 (including Reissues)						50	25
Each independent claim over 3 (including Reissues)						200	100
Multiple dependent claims						360	180
<b>Total Claims</b>		<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>	<b>Multiple Dependent Claims</b>		
- 20 =		x	=		<b>Fee (\$)</b>		<b>Fee Paid (\$)</b>
<b>Indep. Claims</b>		<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>			
- 3 =		x	=				
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<b>Total Sheets</b>	<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>			
- 100 =	50	(round up to a whole number) x	=				
<b>4. OTHER FEE(S)</b>							
Non-English Specification, \$130 fee (no small entity discount)						<b>Fees Paid (\$)</b>	
Other (e.g., late filing surcharge): 1251 Extension for response within first month						120.00	
1402 Filing a brief in support of an appeal						500.00	

SUBMITTED BY		Registration No.	Telephone
Signature	<i>[Signature]</i>	39,294	(202) 331-7111
Name (Print Type)	Susan E. Shaw McBee		Date August 25, 2005